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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/699,770 | 10/30/2000 | Tara Lynn Alvarez | 1-3 | 6941 |

7590 08/09/2004

Docket Administrator Rm 3C-512
Lucent Technologies Inc
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EXAMINER

HAN, CLEMENCE S

ART UNIT PAPER NUMBER

2665

DATE MAILED: 08/09/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

3

Office Action Summary

Application No.

09/699,770

Applicant(s)

ALVAREZ ET AL.

Examiner

Clemence Han

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Responsive to amendment received on May 25, 2004, amended claim 9 is entered as requested.

Information Disclosure Statement

2. An initialed and dated copy of Applicant's IDS form 1449, Paper No. 5, is attached to the instant Office action.

Claim Objections

3. Claim 1-9 are objected to because of the following informalities: Claim 1 and 7 use the acronyms "DSI" and "NDSI" without prior definitions. Claim 8 uses the acronym "IAD" without prior definition. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 3 recites the limitation "the step of transmitting DSI" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

7. Regarding claim 6, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claim 1 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Keenan et al. (US Patent 6,570,890).

In regard to claim 1 and 7, Keenan teaches a method for transmitting DSI and NDSI over a communication link of a communication network, the method comprising the steps of: transmitting fragmented NDSI in accordance with a network protocol where the fragmenting is based on parameters of received DSI and is performed in accordance with a network layer protocol (Column 8 Line 45–50).

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claim 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keenan et al. in view of Gerszberg et al. (US Patent 6,424,646).

In regard to claim 2, Keenan teaches a method for transmitting DSI and NDSI over a communication link of a communication network. Keenan, however, does not teach the step of transmitting NDSI comprising calculating a fragmentation requirement for each received initial DSI; reviewing the fragmentation requirements of the received DSI after a new DSI requirement was calculated or after transmission of a DSI was terminated to determine a fragmentation requirement that is most restrictive; and altering the fragmenting of NDSI to comply with the most restrictive fragmentation requirement. Gerszberg teaches the step of transmitting NDSI comprising calculating a fragmentation requirement for each received initial DSI; reviewing the fragmentation requirements of the received DSI after a new DSI requirement was calculated or after transmission of a DSI was terminated to determine a fragmentation requirement that is most restrictive; and altering the fragmenting of NDSI to comply with the most restrictive fragmentation requirement (Column 12 Line 66 – Column 13 Line 9). It would have been obvious to one skilled in the art to modify Keenan to alter the fragmenting of NDSI according to the requirement determined by DSI as taught by Gerszberg in order to use the bandwidth more efficiently (Column 13 Line 17–18).

In regard to claim 3, Keenan teaches the step of transmitting DSI in accordance with required timing relationships (Figure 5). Keenan, however, does not teach transmitting NDSI in a non-fragmented manner when there are no DSI to be transmitted. Gerszberg teaches transmitting NDSI in a non-fragmented manner when there are no DSI to be transmitted (Column 12 Line 66 – Column 13 Line 9). It would have been obvious to one skilled in the art to modify Keenan to alter the fragmenting of NDSI according to the requirement determined by DSI as taught by Gerszberg in order to use the bandwidth more efficiently (Column 13 Line 17–18).

In regard to claim 4, Gerszberg teaches the network protocol as an OSI-based layer 3 protocol (Column 11 Line 4–11).

In regard to claim 5, Gerszberg teaches the fragmenting further based on information rate of the communication link (Column 12 Line 66 – Column 13 Line 9).

In regard to claim 6, Gerszberg teaches the parameters of the received DSI comprise such variables as information compression, sample rate of DSI, number of communication channels included in the DSI, amount of overhead information included in the DSI and amount of subscriber information in the DSI (Column 12 Line 66 – Column 13 Line 9).

In regard to claim 8, Keenan teaches an IAD 44 coupled to subscriber equipment and to an access network.

In regard to claim 9, Gerszberg teaches host equipment 22 where such host equipment is coupled to a packet based communication network and to an access network.

Response to Arguments

12. Applicant's arguments, see page 6 and 7, filed on May 25, 2004, with respect to the rejections of claims 1-5, 7 and 9 under 35 USC § 102(e) and claims 6 and 8 under 35 USC § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made in view of Keenan et al. and Gerszberg et al.. Keenan was cited in the previous office action and Gerszberg is a newly found prior art reference.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to the fragmentation in general.


U.S. Patent 6,633,540 to Raisanen et al.

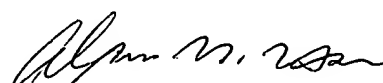
U.S. Patent 5,541,919 to Yong et al.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (703) 305-0372. The examiner can normally be reached on Monday-Thursday 7 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Clemence Han
Examiner
Art Unit 2665



ALPUS H. HSU
PRIMARY EXAMINER